# ITOS Status Reporter

ITOS User's Manual

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The itos\_report\_status program periodically reports the values of selected mnemonics in the ITOS telemetry database. The report takes the form of a binary CCSDS telemetry packet, and is sent over a TCP/IP socket.

The identity (application ID) of the packet is given by command line argument. The layout and contents of the packet are given by the database map for the packet corresponding to the given ID.

As a side effect, itos\_report\_status clears the static flag for each mnemonic in the status packet. Since these mnemonics appear in a packet definition, the database builder will set their static flags by default. But since ITOS is generating rather than receiving this packet, another mechanism is needed to clear their static flags and allow the mnemonic values to display normally on local pages.

Chapter 1: Usage 2

# 1 Usage

 $\verb|itos_report_status| -- \verb|packet-id| packet| -- \verb|interval| interval| libitos\_sockets| args|$ 

### '--packet-id'

gives the application ID, packet, of the CCSDS telemetry packet to use for the status message. A map corresponding to this ID must exist in the ITOS database.

#### '--interval'

gives the *interval*, in floating-point seconds, on which the application should output a status packet.

### 'libitos\_sockets args'

are given by the libitos\_sockets users guide. The application can form any kind of standard TCP/IP connection or association with the destination of the status packet stream.

# 2 Database Support

The itos\_report\_status application will form its report packet from any set of mnemonics in the database, including ITOS internal mnemonics (so-called *global* mnemonics which begin with 'gbl\_') and telemetry mnemonics.

Since this application was created for cases where ITOS is used as a front-end processor, the mnemonics most commonly used are those associated with the telemetry processing system. An example status packet is given in the 'dbx/fep.dbx-opt' file as AppID 2041.